25776 US1

Appl. No. 10/772,502 Amdt. dated 10/21/2009 Reply to Office action of 07/22/2009

AMENDMENTS TO THE CLAIMS

In the claims, please cancel claims 20, 27 and 39 amend claims 13, 19, 26, 30, and 33 as follows:

1-12. (canceled)

- 13. (currently amended) A composition for delivery of a polynucleotide to a cell comprising: the polynucleotide and a <u>cationic</u> polyvinylether random copolymer, wherein the polyvinylether random copolymer comprises cationic monomeric units and alkyl or aryl monomeric units and is capable of lysing red blood cells.
- 14. (original) The composition of claim 13 wherein the polynucleotide is associated with the polyvinylether via an electrostatic interaction.
- (currently amended) The composition of claim 13 wherein the polynucleotide is associated with the polyvinylether via <u>labile maleamate</u> covalent linkage.
- (original) The composition of claim 15 wherein the polynucleotide is associated with the polyvinylether via a labile covalent linkage.

17-18. (canceled)

- 19. (currently amended) A composition for delivery of a polynucleotide to a cell comprising: the polynucleotide, a cationic polymer, and an anionic reversibly modified polyvinylether random copolymer wherein the anionic reversibly modified polyvinylether random copolymer comprises hydrophobic monomeric units and maleic anhydride 2-propionic-3-methylmaleic anhydride modified amine-containing monomeric units wherein:
 - a) the modified polyvinylether random copolymer is not membrane active and
 - b) cleavage of the maleie anhydride 2-propionic-3-methylmaleic anhydride groups from the amine-containing monomeric units results in an unmodified polyvinylether random copolymer that is membrane active and capable of lysing red blood cells.

20-21. (canceled)

- 22. (original) The composition of claim 13 wherein the polynucleotide is selected from the list consisting of: DNA, plasmid DNA, linear DNA, dsDNA, ssDNA, RNA, expression cassette, antisense oligonucleotide, siRNA, microRNA, RNA expression cassette, ribozyme, dsRNA, and synthetic polynucleotides.
- 23. (original) The composition of claim 22 wherein the polynucleotide expresses a protein.
- 24. (original) The composition of claim 22 wherein the polynucleotide expresses an RNA.

Appl. No. 10/772,502 25776 US1 Amdt, dated 10/21/2009

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(original) The composition of claim 22 wherein the polynucleotide inhibits expression of a
gene in the cell.

26. (currently amended) The composition of claim 13 wherein [[the]] <u>amines on the</u> polyvinylether random copolymer [[is]] <u>are</u> reversibly modified <u>to carboxyls to convert the</u>

polyvinylether random copolymer to a labile polyanion.

- 27-29. (canceled)
- (currently amended) The composition of claim 26 wherein the polynucleotide is covalently
 linked to the reversibly modified polyvinylether random copolymer via a labile maleamate
 bond.
- 31-32. (canceled)
- (currently amended) The composition of claim [[31]] 13 wherein the cationic monomeric units consist of amine-containing monomeric units.
- 34. (previously presented) The composition of claim 13 wherein the polyvinylether random copolymer comprises cationic monomeric units and at least two classes of alkyl or aryl monomeric units.
- 35. (canceled)
- (previously presented) The composition of claim 34 wherein the cationic monomeric units consist of amine-containing monomeric units.
- (previously presented) The composition of claim 36 wherein the alkyl monomeric units contain alkyl groups selected from the group consisting of: ethyl, propyl, butyl, dodecyl, and octadecyl.
- 38-40. (canceled)